Delta Operations for Salmonids and Sturgeon (DOSS) Group
Conference call: 11/20/12 at 9:00 a.m.

Objective: Provide advice to the Water Operations Management Team (WOMT) and National Marine Fisheries Service (NMFS) on measures to reduce adverse effects from Delta operations of the Central Valley Project and the State Water Project on salmonids and green sturgeon. DOSS will work with other technical teams. DOSS notes and advice can be found at: http://www.swr.noaa.gov/ocap/doss.htm.

DWR: Mike Ford, Edmund Yu, Kevin Reece, Tracy Pettit, Loi Tran
FWS: Leigh Bartoo
NMFS: Barb Byrne, Jeff Stuart, Barbara Rocco
Reclamation: Russ Yaworsky
DFG: Krystal Acierto, Jason Roberts, Bob Fujimura
EPA: Bruce Herbold
SWRCB, USGS: not present

Agenda
1. Fish monitoring
2. Current operations

Fish Monitoring: The following table presents fish monitoring data. Unless otherwise noted, reported sizes are fork length. See: http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm.

Location	Chipps Is. Midwater Trawl	Sacramento Trawls	Mossdale Kodiak Trawl	Beach Seines	Knights Landing RST	Tisdale Weir RST
Sample Date	11/13, 14, 16	11/13, 15, 16	11/13, 14, 16	11/13–11/16	11/14, 16, 19	11/14, 16, 19
Total Catch	**1**	**1**	**0**	**32**	**0**	**0**
FR						
WR		1 (500 mm)				
SR						
LFR						
Ad-Clipped Chinook						
DS	1 (60 mm)			32 (avg. 72 mm)		
Splittail						
Longfin						
SH (ad-clip)						
SH (wild)						
W. Temp. (avg. °F)	58.8	54.0	54.0	54.9	55.0	56.0
Flows (avg.					4,050	6,300

cfs)						
Turbidity (avg. NTU)	11.7	5.8	9.4	16.0	10.3	8.6
WR/LFR Avg. CPUE						
FR/SR Avg. CPUE						

Key: FR = Fall run; LFR = Late-fall run; SR = Spring run; WR = Winter run; SH = Steelhead; DS = Delta smelt; LFS = Longfin smelt; CPUE = catch per unit of effort

Fish Monitoring: Per BiOp RPA Action IV.1.2, a Knights Landing or Sacramento River trawls catch index of >3 fish/day would trigger closure of the DCC gates for 3 days. If either index is >5 fish/day, the DCC gates would close until the index drops below 3 fish/day. If either trigger index is met, DOSS will review the data and make a recommendation to WOMT.

No juvenile Chinook have been caught recently in the Knights Landing rotary screw traps (through 11/19) or the Sacramento trawls (through 11/16), so no trigger for DCC gate closure has been met.

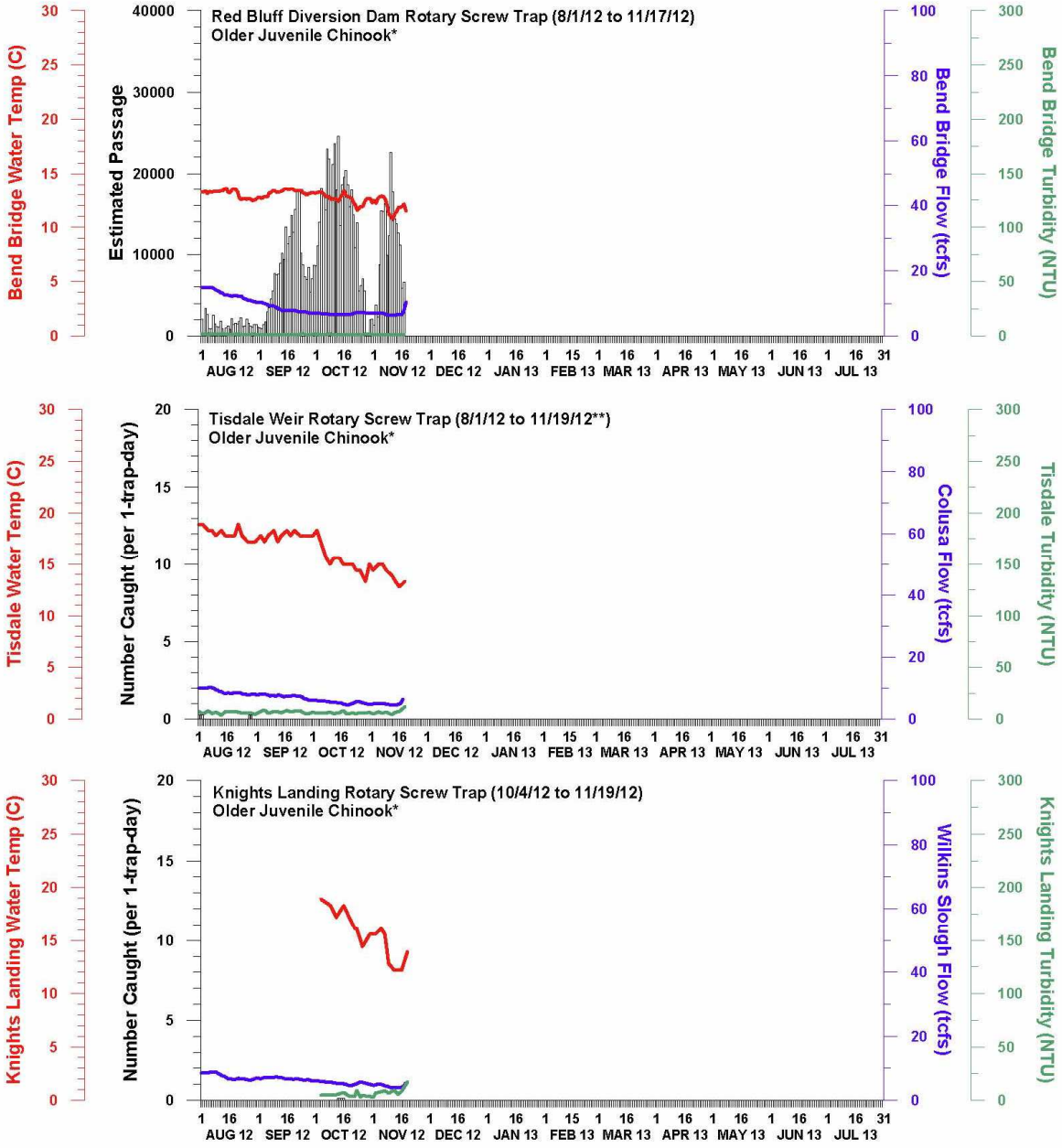
The group discussed what monitoring data would be available between now and the next DOSS call, and how to manage communication in the interim. Because of the Thanksgiving holiday, the rotary screw traps at Knights Landing will be checked on Wednesday and most likely not again until Saturday (11/24/12). The group also discussed the need to provide notice to boaters about a gate closure; operators expressed concern about closing the DCC gates for 3 days over the weekend after Thanksgiving.

Byrne (NMFS) will check on when the data will be available and will inform DOSS. She will report to DOSS by email (on Wednesday and Monday, Friday if data available) on any available data and will call Russ Yaworsky (Reclamation) if a trigger is exceeded. Because of the need for providing notice of closure, and the holiday, the earliest closure of the DCC gates would be Monday.

Yu (DWR) provided information on juvenile salmonids passing Red Bluff Diversion Dam (see table, Appendix A).

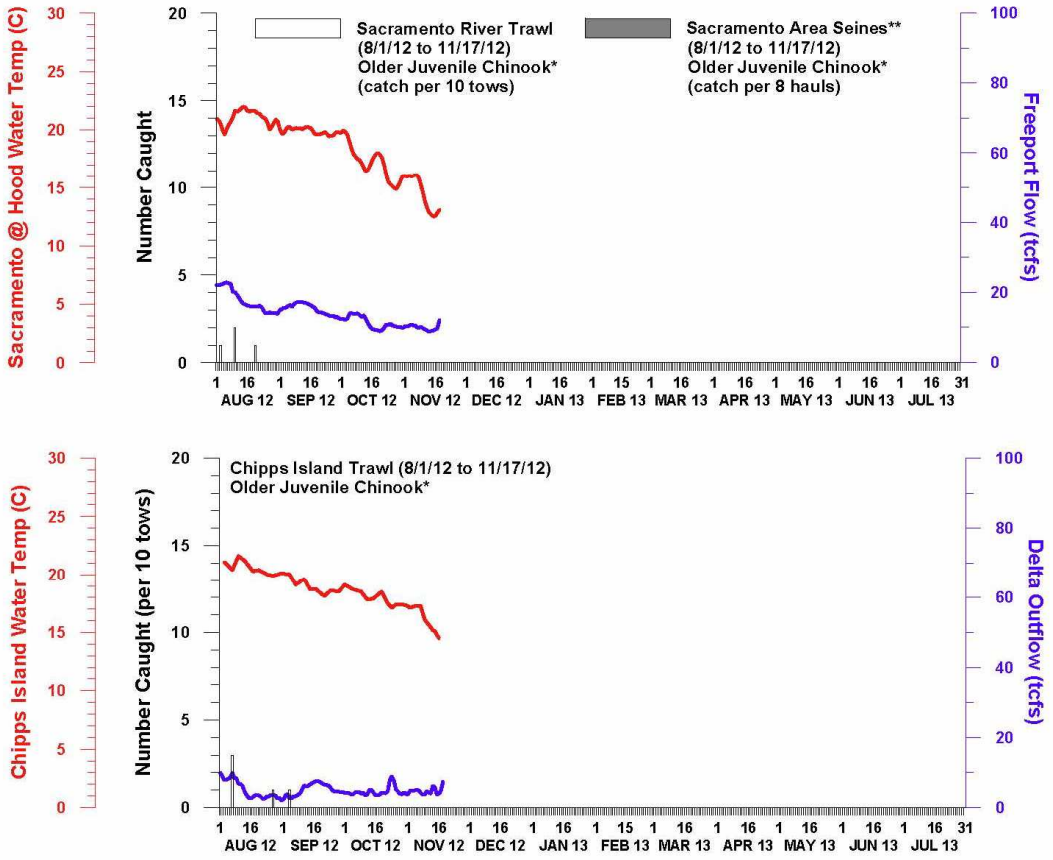
NOTE: Below are graphs provided by DWR through 11/19/12 for older juvenile salmon and steelhead in the Sacramento and San Joaquin rivers. For additional graphs, please visit the DWR website at: http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm.

NUMBER OF OLDER JUVENILE CHINOOK MEASURED IN THE SACRAMENTO RIVER



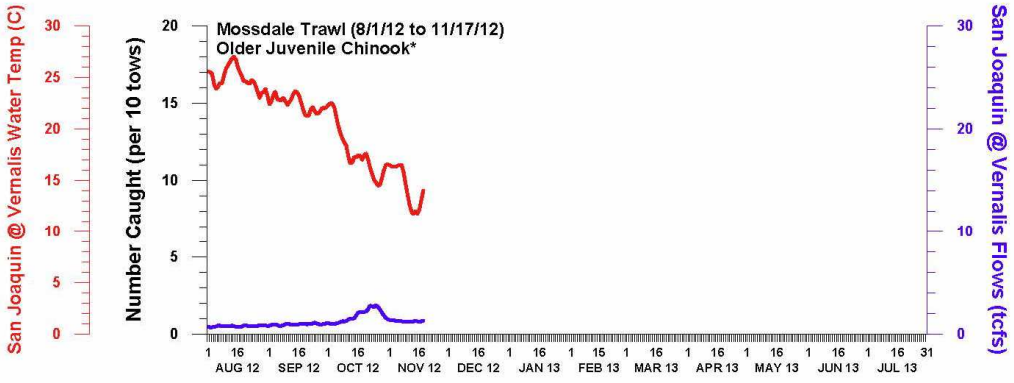
DWR-DES 19 NOV 2012
Preliminary, subject to revision.
*Older juvenile Chinook defined as all Chinook above the minimum length for winter-run (Frank Fisher model).
** 9/14 at Tisdale Weir: One older juvenile caught, but not presented in graph since CPUE could not be calculated because the RR cone clicker malfunctioned.

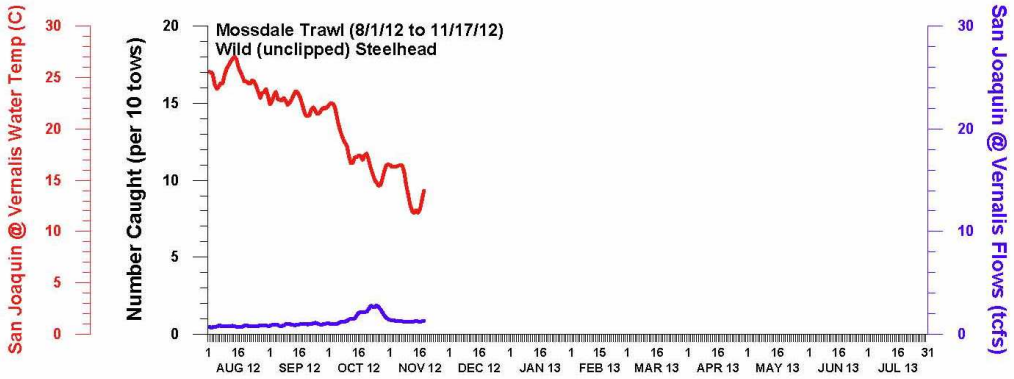
NUMBER OF OLDER JUVENILE CHINOOK MEASURED IN THE LOWER SACRAMENTO RIVER & CHIPPS ISLAND



DWR-DES 19 NOV 2012
Preliminary, subject to revision.
*Older juvenile Chinook defined as all Chinook above the minimum length for winter-run (Frank Fisher model).
**Sacramento area seine route consists of the following seine sites: Verona, Elkhorn, Sand Cove, Discovery Park, American River, Miller Park, Sherwood Harbor, and Garcia Bend.

NUMBER OF OLDER JUVENILE CHINOOK AND STEELHEAD MEASURED IN THE SAN JOAQUIN RIVER





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Preliminary, subject to revision.
*Older juvenile Chinook defined as all Chinook above the minimum length for winter-run (Frank Fisher model).

Operations (11/20/12)

SWP		CVP	
Exports (cfs)			
Clifton Court Forebay	6,000 (5,000 tomorrow)	Jones Pumping Plant	3,500 (4,500 tomorrow)
Reservoir Releases (cfs)			
Feather - Oroville	2,400	Nimbus	1,850
		Sacramento - Keswick	5,600 (5,400 tomorrow, 5,200 Thursday, 5,000 on Friday)
		Stanislaus - Goodwin	275
Reservoir Storage (in TAF, % of capacity)			
San Luis (SWP)	241	San Luis (CVP)	460 (47)
Oroville	1,779	Shasta	2,390
New Melones		Folsom	365
Delta Operations			
DCC	Open	Sacramento River at Freeport (cfs)	13,565
Outflow Index (cfs)	~8,900	San Joaquin River (cfs) at Vernalis	1,309
Total Delta Inflow (cfs)	15,595	OMR (daily) (cfs)	
Water Temperature (°F)		OMR 5 day (cfs)	
X2 (km)	>81	OMR 14 day (cfs)	
E/I (%)	58.7		

The B2IT group is discussing the schedule for Keswick releases.

Outflow is currently the factor controlling Delta operations. Outflow is not affected by whether the DCC gates are open or closed. Water quality is good enough that project operators expect that the DCC could be closed for 3 days under current conditions if that action response is triggered by the monitoring data at Knights Landing or the Sacramento Trawls (see discussion above).

Smelt Working Group: Will meet on 11/26/12 and report on next Tuesday's DOSS call.

DOSS advice to WOMT and NMFS: None.

Next Meeting: The next DOSS conference call meeting is scheduled for 11/27/12 at 9:00 a.m.

Appendix A. Preliminary daily estimates of passage, 90% confidence intervals, and fork length ranges of juvenile salmonids sampled at Red Bluff Diversion Dam for November 4, 2012, through November 17, 2012.

Table 1.– Preliminary estimates of passage by brood-year (BY) and run for unmarked juvenile Chinook salmon and steelhead trout captured by rotary-screw traps at Red Bluff Diversion Dam (RK391), Sacramento River, CA, for the dates listed below. Results include estimated passage, peak river discharge volume, water temperature, turbidity, and fork length (mm) range in parentheses. A dash (-) indicates that sampling was not conducted on that date.

				Estimated passage				
Date	Discharge volume (cfs) [1]	Water temperature (°C)	Water turbidity (NTU)	BY12 Winter	BY12 Spring	BY11 Fall	BY12 Late-Fall	BY12 RBT
11/4/2012	6,980	13.0	1.0	6,665 (39 − 76)	2,073 (31 − 38)	0 (−)	178 (80 − 115)	30 (85)
11/5/2012	6,940	13.1	1.1	12,894 (39 − 75)	2,486 (33 − 38)	0 (−)	329 (77 − 119)	30 (79)
11/6/2012	7,300	13.0	1.2	13,558 (39 − 77)	1,680 (33 − 38)	0 (−)	295 (78 − 118)	88 (71 − 89)
11/7/2012	7,150	12.8	1.4	14,022 (39 − 76)	2,243 (31 − 38)	30 (159)	305 (82 − 120)	61 (77 − 105)
11/8/2012	6,900	12.1	1.4	8,453 (40 − 77)	1,477 (32 − 39)	0 (−)	117 (83 − 108)	60 (81 − 83)
11/9/2012	6,490	11.0	1.0	10,419 (40 − 77)	1,872 (31 − 39)	0 (−)	258 (79 − 139)	0 (−)
11/10/2012	6,490	10.8	1.1	20,527 (40 − 78)	2,081 (32 − 39)	0 (−)	258 (84 − 127)	56 (87 − 101)
11/11/2012	6,490	10.4	1.4	16,216 (40 − 79)	1,436 (33 − 39)	0 (−)	558 (80 − 127)	87 (88 − 105)
11/12/2012	6,450	10.8	1.1	13,249 (41 − 79)	1,097 (32 − 40)	29 (146)	412 (89 − 122)	0 (−)
11/13/2012	6,470	11.2	1.1	12,475 (41 − 80)	1,334 (33 − 40)	0 (−)	403 (82 − 141)	54 (91 − 100)
11/14/2012	6,720	11.6	0.9	11,726 (41 − 78)	914 (28 − 40)	0 (−)	322 (82 − 138)	0 (−)
11/15/2012	6,740	11.7	1.0	10,200 (41 − 81)	933 (29 − 40)	33 (164)	297 (91 − 141)	99 (70 − 119)
11/16/2012	6,720	11.7	1.2	5,421 (42 − 76)	408 (34 − 41)	0 (−)	89 (86 − 123)	0 (−)
11/17/2012	7,200	11.9	1.5	6,078 (42 − 82)	503 (32 − 41)	0 (−)	102 (121 − 148)	26 (79)
Biweekly Total [2]				**161,903**	**20,537**	**92**	**3,923**	**591**
Biweekly Lower 90% Confidence Interval				133,765	16,531	-52	2,784	213
Biweekly Upper 90% Confidence Interval				190,041	24,543	236	5,062	969
Brood Year Total				**866,852**	**71,856**	**6,037,704**	**98,711**	**133,854**
Brood year Lower 90% Confidence Interval				694,563	55,545	3,410,251	10,304	80,467
Brood year Upper 90% Confidence Interval				1,039,141	88,167	8,665,158	187,118	187,240

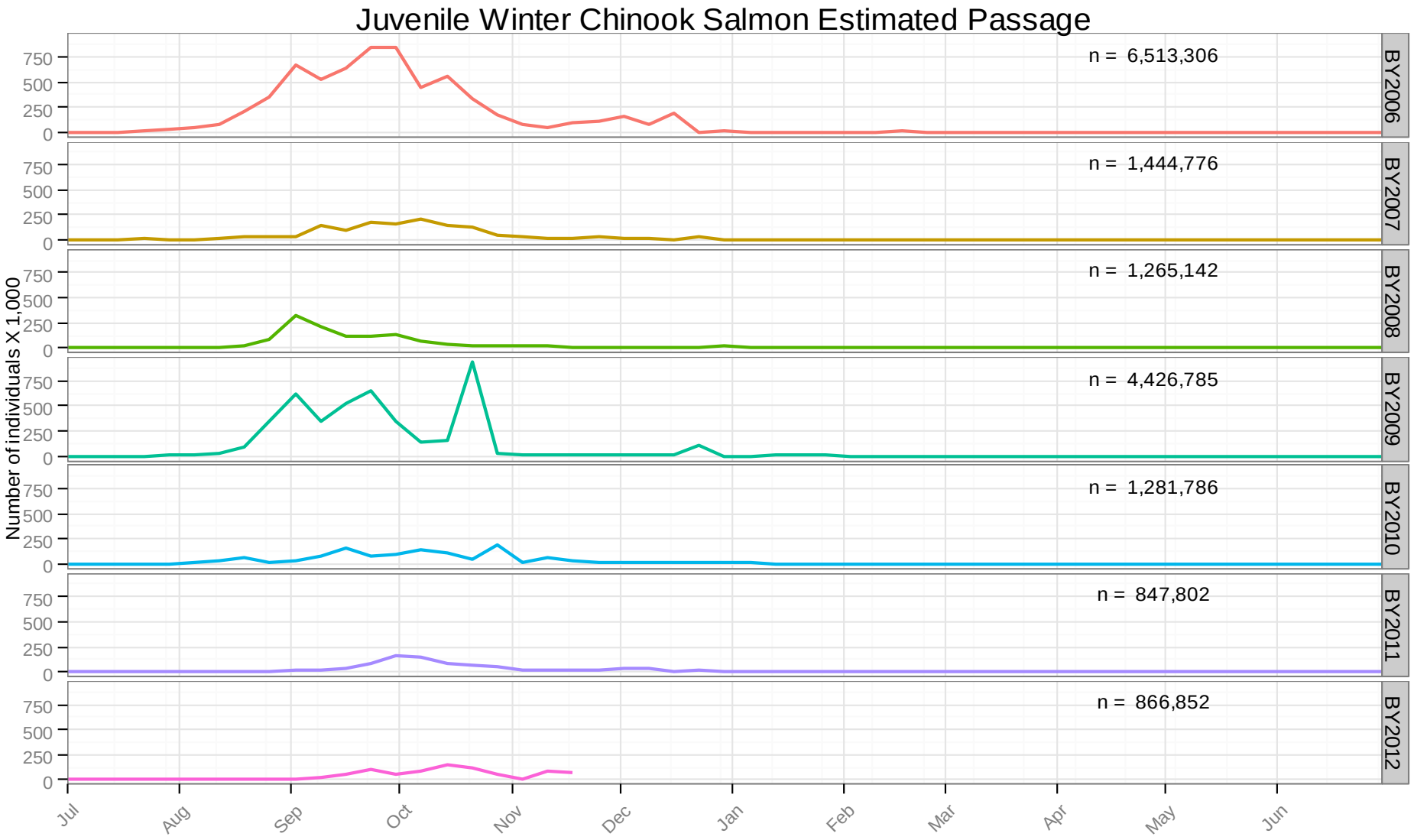

Figure 1. Weekly estimated passage of juvenile winter Chinook Salmon at Red Bluff Diversion Dam (RK391), by brood-year (BY). Fish were sampled using rotary-screw traps for the period July 1 2006 to present .